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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,577	11/24/2003	Lars Christian Fabricius	000035-060	1227
21839 7590 02/13/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER FORD, JOHN K	
			ART UNIT	PAPER NUMBER
			3744	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/13/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/718,577

Applicant(s)

FABRICIUS ET AL.

Examiner

John K. Ford

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/18/06
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19, 21-34 is/are pending in the application.
- 4a) Of the above claim(s) 1-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/13/06

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Applicant's response of December 18, 2006 has been carefully considered. With respect to the added limitation of an "isolating valve operable for flushing and cleaning", the valve in question (16) is a simple valve as disclosed in paragraph 0053 of applicant's specification. Whether it is used for flushing or cleaning depends on what the human operating the system wants to do with the valve. In general, in an apparatus claim the manner of operating the apparatus does not impart patentability to the apparatus itself. See MPEP 2114, incorporated here by reference. In other words, the claimed fluid commissioning module does not undergo a metamorphosis into a new fluid commissioning module merely by affixing instructions to it to use this particular valve for flushing and cleaning. Moreover, whenever the isolating valve in the bypass conduit of Morgan (USP 5,284,204) or Sueyoshi (JP 2000-346378) is open, liquid from the supply header will be discharged directly into the return header with little pressure drop. It is submitted that this valve action by the respective isolating valves of Morgan (USP 5,284,204) and/or Sueyoshi (JP 2000-346378), whenever it occurs, will inherently flush out the return header and clean it of any sediments etc that have accumulated there. Similarly the isolating valve, when it is closed, will inherently cause the same sort of flushing and cleaning of the heat exchangers.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 23, 24, 25, 28, 30, 31, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable the combined teachings of Dumser (USP 6,089,263) and Morgan (USP 5,284,204) and/or Sueyoshi (JP 2000-346378).

Dumser shows all of the claimed subject matter except a bypass conduit between the fluid supply inlet and the fluid supply outlet. To have provided such a bypass conduit (with an isolating valve) between the forward and return headers 2 and 3 of Dumser would have been obvious to one of ordinary skill in the art as shown by Morgan at bypass 50 (controlled by isolating valve 52) for the purpose of advantageously allowing the use of a single speed pump during low demand situations (as disclosed in Morgan, col. 4, lines 23-27), as opposed to the more expensive modulating type (e.g. variable speed) pump (discussed in Morgan, col. 4, lines 28-29). Moreover, whenever the isolating valve in the bypass conduit of Morgan (USP 5,284,204) is open, liquid from the supply header will be discharged directly into the return header with little pressure drop. It is submitted that this valve action by the isolating valve of Morgan (USP 5,284,204), whenever it occurs, will inherently flush out the return header and clean it of any sediments etc that have accumulated there. Similarly the isolating valve, when it is closed, will inherently cause the same sort of flushing and cleaning of the heat exchangers.

Likewise, to have provided such a bypass conduit (with an isolating valve) between the forward and return headers 2 and 3 of Dumser would have been obvious to one of ordinary skill in the art as shown by Sueyoshi at bypass circuit 120 (controlled by isolating valve 104) for the purpose of advantageously "lessening the burden on the pump and boiler." Moreover, whenever the isolating valve in the bypass conduit of Sueyoshi (JP 2000-346378) is open, liquid from the supply header will be discharged directly into the return header with little pressure drop. It is submitted that this valve action by the isolating valve of Sueyoshi (JP 2000-346378), whenever it occurs, will inherently flush out the return header and clean it of any sediments etc that have accumulated there. Similarly the isolating valve, when it is closed, will inherently cause the same sort of flushing and cleaning of the heat exchangers.

Regarding claim 25, Sueyoshi clearly shows a valve immediately below the gas vent 110, an obvious feature to have added to the prior art to isolate the gas vents when not being used. Regarding claim 30, Sueyoshi discloses a test bulb at 112 an obvious feature to have used to test conditions within the fluid circuit. Regarding claim 33, Sueyoshi teaches stainless steel (extremely corrosion resistant) in paragraph 17 of the translation attached thereto, an obvious material to have used to prevent corrosion problems.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Dumser (USP 6,089,263) and Morgan (USP 5,284,204) and/or

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Sueyoshi (JP 2000-346378) as applied to claim 21 above, and further in view of DE 3101070.

To have added a sludge and/or oxygen separator to the aforementioned system to advantageously avoid corrosion or contamination of the system would have been obvious to one of ordinary skill in the art.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Dumser (USP 6,089,263) and Morgan (USP 5,284,204) and/or Sueyoshi (JP 2000-346378) as applied to claim 21 above, and further in view of Longini (USP 4,509,679).

To have added a flow meter to the aforementioned system at the output of the return header from the plurality of floor heaters and the main system providing the heating fluid would have been obvious to one of ordinary skill in the art to advantageously aid in the control of the main pump. See the Longini disclosure related to flow meter 14.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Dumser (USP 6,089,263) and Morgan (USP 5,284,204) and/or Sueyoshi (JP 2000-346378) as applied to claim 21 above, and further in view of JP 9-210380.

To have used the orifice type flow controllers of JP '380 (see element 51) in place of the variable type shown in the prior art discussed above would have been obvious to advantageously reduce the overall cost of the valving.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Dumser (USP 6,089,263) and Morgan (USP 5,284,204) and/or Sueyoshi (JP 2000-346378) as applied to claim 21 above, and further in view of JP 2001-141249.

To have added a drain cock to the bypass to permit faster draining would have been obvious in view of Figure 10 of JP '249, valve V3.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of the prior art as applied to any one of claim 21-33 above, and further in view of FR 2,560,343.

FR '343 teaches the type of pipe claimed. To have used this type of pipe in the prior art to avoid corrosion would have been obvious to one of ordinary skill in the art.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP§706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

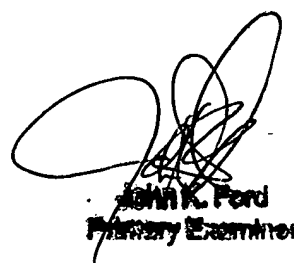
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Ford whose telephone number is 571-272-4911. The examiner can normally be reached on Mon.-Fri. 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John K. Ford  
Primary Examiner